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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,651	04/16/2001	Takeshi Fukuda	05453.0037	3687

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EXAMINER

WELLS, LAUREN Q

ART UNIT PAPER NUMBER

1617

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/834,651	<b>Applicant(s)</b> FUKUDA ET AL.	
	<b>Examiner</b> Lauren Q Wells	<b>Art Unit</b> 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-8 and 12 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,6-8 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1, 3-8 and 12 are pending. Claims 4-5 are withdrawn from consideration, as they are directed to non-elected subject matter.

The Amendment filed 1/20/04, amended page 20, Table 1, of the specification.

#### ***Response to Applicant's Arguments/Amendment***

The Applicant's arguments filed 1/20/04 to the rejection of claims 1, 3, 6-8 and 12 made by the Examiner under 35 USC 103 have been fully considered and deemed not persuasive.

#### ***103 Rejection Maintained***

The rejection of claims 1, 3, 6-8, and 12 under 35 U.S.C. 103(a) as being unpatentable over Shibasaki et al. (5,587,010) in view of Fukuda et al. (6,197,277) is MAINTAINED for the reasons set forth in the Office Action mailed 10/20/03, and those found below.

Applicant argues, "the alumina particles disclosed by Shibasaki et al. would not possess the claimed aspect ratio. Specifically, Examples 1 and 2 note that both particle size and thickness share a proportional relationship to temperature and pressure during production. . .one of ordinary skill in the art, reading the disclosure of Shibasaki et al., would understand that any change in particle size or diameter would be met with a corresponding change in particle thickness". This argument is not persuasive. First, it is respectfully pointed out that it is well-established that consideration of a reference is not limited to the preferred embodiments or working examples, but extends to the entire disclosure for what it fairly teaches, when viewed in light of the admitted knowledge in the art, to person of ordinary skill in the art. In re Boe, 355 F.2d 961, 148 USPQ 507, 510 (CCPA 1966); In re Lamberti, 545 F.2d 747, 750, 192 USPQ 279, 280 (CCPA 1976); In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 570 (CCPA 1982); In re

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Kaslow, 707 F.2d 1366, 1374, 217 USPQ 1089, 1095 (Fed. Cir. 1983). Second, claim 1 of Shibasaki et al. teaches fine flaky alumina particles having a particle size of 1.0um or less and a thickness of 0.1um or less. Third, a change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Fourth, even if particle diameter and thickness both decrease under the temperature and pressure of Shibasaki et al., the reference still meets the instant aspect ratio. For example a particle with a diameter of 0.9um and a thickness of 0.01um, results in an aspect ratio of 90.

Applicant argues, "Example 3 represents the maximum production temperature and pressure capable of producing flaky alpha-alumina particles in the Shibasaki et al. process, at least given the testing apparatus used in the reference. . . Example 3 of Shibasaki et al. would have an aspect ratio. . . of about 10. Following the graph of Figure 1, if the temperature of the treatment process is decreased from its maximum of 600 C, particle diameter decreases. . . Following the graph of Figures 2, if the pressure of the treatment process is decreased from its maximum of 200 kg/cm<sup>2</sup>, particle diameter decreases. Given the statement in Example 2, particle thickness should also decrease. . . One of ordinary skill would thus read Shibasaki et al. to disclose that any decrease in production temperature or pressure results in both smaller and thinner particles. Therefore, the aspect ratio of these particles would remain essentially the same and certainly not reach the range of the pending claims". This argument is not persuasive. First, it is respectfully pointed out that Example 2 does not state that the decrease in diameter and thickness is proportionate. It is respectfully pointed out that Applicant is assuming this fact. Second, it is respectfully pointed out that nowhere in the reference is the maximum temperature limited to 600 C. While Figure 1 graphs a temperature maximum of 600 C, the reference is not

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limited to 600 C as its maximum temperature of production. Third, Applicant is again arguing against the preferred embodiments when the reference was considered as a whole for what it teaches those of ordinary skill in the art.

Applicant argues, "No disclosure in Shibasaki et al. points to any modifications of its process that would enable one of ordinary skill in the art to practice its process and achieve alumina particles with a significantly greater aspect ratio than 10". This argument is not persuasive for the reasons given in the above paragraph. The Examiner again respectfully points out that a change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Applicant argues, "Shibasaki et al. simply never discloses how to achieve such a disproportionately low particle thickness given the explicit upper limits on particle size and never provides any motivation to modify its teachings to achieve a high aspect ratio like that of the pending claims". This argument is not persuasive. First, it is respectfully pointed out that Shibasaki et al. do not limit themselves to the aspect ratios in Examples 1-3. Claim 1 of Shibasaki et al. teaches particles with a size of 1.0um or less and a thickness of 0.1um or less. This open ended teaching encompasses the instant aspect ratio. Second, it is respectfully pointed out that Shibasaki et al. does not teach an "explicit upper limit on particle size" as argued. Shibasaki et al. teach a particle size of 1.0um or less. Again, it is respectfully pointed out, as pointed out in the previous Office Action and the paragraphs above, that altering the size of a particle is within the skill of the artisan.

Applicant argues, "Even more significantly, in paragraph [043] on page 13, Applicants state that particles with an average thickness of less than 0.01um crumble during the production

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of a cosmetic product". This argument is not persuasive, as it is not even commensurate in scope with the instant claims. Additionally, the particles of Shibasaki et al. do not have to have a thickness of less than 0.01um to meet the aspect ratio of the instant claims. For Example, a particle with a diameter of 0.9um and a thickness of 0.01um, has an aspect ratio of 90. Thus, Shibasaki et al. do not teach away from the instant invention, i.e., aspect ratio.

Applicant argues, "the particle diameter and aspect ratio cited here in the pending claims are attributes of the claimed product itself, not of the process used to create the product". This argument is not persuasive. It is respectfully pointed out that the instant particles were made by some process, wherein by this process, it is within the skill of the artisan to discover optimum/workable ranges and particle sizes.

Applicant argues, "Fukuda et al. . .specifically limits the aspect ratio of its particles to between 15 and 50. . .Therefore, Fukuda et al. does not add any teaching and certainly no motivation to achieve an aspect ratio of 55 to 2000". This argument is not persuasive. It is respectfully pointed out that Fukuda et al. is merely relied upon to teach a phosphoric compound and zeta potential.

The Examiner respectfully suggests that Applicant provide unexpected results comparing the instant claims with that of the closest prior art, establishing the criticality of the instant aspect ratio/size of the particle. The following are guidelines for showing unexpected results. It is applicant's burden to demonstrate unexpected results over the closest prior art. See MPEP 716.02, also 716.02 (a) - (g). Furthermore, the unexpected results should be demonstrated with evidence that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance. *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. &

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Inter. 1992). Moreover, evidence as to any unexpected benefits must be "clear and convincing" *In re Lohr*, 137 USPQ 548 (CCPA 1963), and be of a scope reasonably commensurate with the scope of the subject matter claimed, *In re Linder*, 173 USPQ 356 (CCPA 1972).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lauren Q Wells whose telephone number is 571-272-0634. The examiner can normally be reached on M&R (5:30-4).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lqw



**SREENI PADMANABHAN**  
**SUPERVISORY PATENT EXAMINER**